

The Use Of Bookwidgets As A Web-Based Medium To Enhance Students' Vocabulary Knowledge

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Abstract

This study aimed to investigate the effectiveness of BookWidgets as a web-based learning medium in enhancing students' vocabulary knowledge. This research employed a quantitative approach with a pre-experimental design using a one-group pre-test and post-test. The population consisted of 191 tenth-grade students at MAN 2 Bone, and 26 students were selected as the sample through random sampling. The instrument used in this study was a vocabulary test. The data were analyzed using mean scores and percentages. The findings revealed that the students' vocabulary knowledge improved after the implementation of BookWidgets. The mean score increased from 59.27 in the pre-test to 75.92 in the post-test, with an improvement of 16.65 points. The interactive features of BookWidgets, such as quizzes, matching exercises, and games, helped students learn vocabulary more effectively by creating an engaging and interactive learning environment. It can be concluded that BookWidgets was effective in enhancing students' vocabulary knowledge and can be used as an alternative web-based learning medium in English language teaching.

Keywords

BookWidgets; English language teaching; Vocabulary knowledge; Web-based learning



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INTRODUCTION

The integration of technology in education has significantly transformed the teaching and learning process, particularly in English language learning. In the digital era, the use of web-based learning media is increasingly emphasized to create interactive, flexible, and student-centered learning environments. These technologies enable students to access learning materials anytime and anywhere, while also promoting active participation and immediate feedback. One of the web-based platforms that can be utilized in English learning is BookWidgets, which provides various interactive activities such as quizzes, matching exercises, and game-based tasks.

Vocabulary plays a crucial role in language learning as it forms the foundation for students' abilities in listening, speaking, reading, and writing. Without sufficient vocabulary knowledge, students often face difficulties in understanding texts and expressing their ideas effectively. However, vocabulary learning remains a challenge for many students due to the use of conventional teaching methods that rely heavily on memorization and textbook-based exercises. These methods tend to be monotonous and less engaging, which results in low student motivation and participation.

Based on preliminary observations conducted at MAN 2 Bone, it was found that students had low interest in learning vocabulary. Many students felt bored during the learning process and were less active in participating in classroom activities. Teachers also reported that students struggled to remember vocabulary and often made mistakes in spelling and word usage. This condition indicates the need for innovative and interactive learning media that can enhance students' motivation and engagement.

Several previous studies have highlighted the effectiveness of gamification and web-based learning media in improving students' learning outcomes. Rachman et al. (2025) found that gamification significantly enhances students' motivation and engagement in English learning. Similarly, Martalia Sinaga et al. (2025) reported that the use of Kahoot! improved students' vocabulary mastery through interactive and game-based learning activities. Furthermore, Kurniawati and Fauziyah (2022) revealed that BookWidgets effectively increased students' engagement in synchronous learning environments.

Although previous studies have shown the positive impact of gamification and interactive media, most of them focused on student engagement rather than specific language outcomes such as vocabulary knowledge. Therefore, there is still a research gap in examining the effectiveness of BookWidgets in improving students' vocabulary knowledge through empirical data.

METHODS

Based on the explanation above, this study aims to investigate whether the use of BookWidgets as a web-based learning medium can enhance students' vocabulary knowledge, with the findings expected to provide valuable insights for teachers in selecting effective learning media and improving vocabulary instruction. This research employed a quantitative approach using a pre-experimental design with a one-group pre-test and post-test to measure the effect of the treatment by comparing students' scores before and after the implementation of BookWidgets. The population consisted of 191 tenth-grade students at MAN 2 Bone, while the sample comprised 26 students selected through a random sampling technique. Two main instruments were used to collect the data, namely a scoring rubric and a test, which were designed to obtain quantitative data related to students' learning outcomes while ensuring objectivity, consistency, and accuracy in the data collection process.

RESULTS AND DISCUSSION

The findings of this study demonstrate that the use of BookWidgets as a web-based learning medium significantly improves students' vocabulary knowledge. The improvement can be observed from the students' mean score, which increased from 64.23 in the pre-test to 77.88 in the post-test. This result indicates a gain of 13.65 points, representing an improvement percentage of 21.25%. The increase suggests that students were able to acquire and retain a greater number of vocabulary items after participating in learning activities through BookWidgets.

One possible explanation for this improvement is the interactive nature of BookWidgets. Unlike conventional vocabulary learning methods that often rely on memorization and repetitive exercises, BookWidgets provides various digital activities that encourage students to actively engage with new vocabulary. Features such as quizzes, matching tasks, word games, and interactive exercises create opportunities for students to practice vocabulary in a more dynamic and meaningful way. As a result, students become more involved in the learning process and are better able to remember the words they learn.

The findings are consistent with Nation's (2001) theory, which emphasizes that vocabulary acquisition requires repeated exposure and continuous practice. According to Nation, learners need multiple encounters with words in different contexts to achieve long-term retention. Through BookWidgets, students were exposed to vocabulary repeatedly across various activities, enabling them to reinforce their understanding of word meanings, forms, and usage. This repeated practice likely played an important role in improving their vocabulary mastery.

Furthermore, the findings support Schmitt's (2000) view that effective vocabulary learning involves repetition, contextualization, and learner engagement. BookWidgets facilitates these three elements simultaneously. Students encounter vocabulary items repeatedly through different tasks, learn them within meaningful contexts, and actively participate in interactive activities. In addition, the immediate feedback provided by the platform allows students to recognize their mistakes and correct them instantly, which enhances the learning process and promotes deeper vocabulary acquisition.

The results also align with the concept of gamification proposed by Sailer and Homner (2020). Gamification refers to the integration of game elements into educational settings to increase learners' motivation and engagement. The interactive and game-based features available in BookWidgets create a more enjoyable learning environment, reducing boredom and increasing students' willingness to participate. When students are motivated and actively involved in learning activities, they are more likely to achieve better academic outcomes, including vocabulary development.

Another important finding is the shift in students' achievement categories after the implementation of BookWidgets. Before the treatment, a considerable number of students were classified in the fair and poor categories. However, after the treatment, more students

achieved good and very good categories. This shift indicates not only a quantitative increase in test scores but also a qualitative improvement in students' overall vocabulary mastery. The improvement suggests that BookWidgets helped students move beyond basic vocabulary recognition toward a more comprehensive understanding of vocabulary usage.

Despite the positive findings, this study has several limitations. The research employed a one-group pre-test and post-test design without a control group, making it difficult to determine whether the observed improvement was solely caused by the use of BookWidgets. Other factors, such as students' individual learning experiences, classroom interactions, or additional exposure to English outside the classroom, may also have contributed to the results. Therefore, future researchers are encouraged to employ more rigorous experimental designs involving control groups and larger samples to provide stronger evidence regarding the effectiveness of BookWidgets in enhancing students' vocabulary knowledge.

CONCLUSION

Based on the findings and discussion, it can be concluded that the use of BookWidgets as a web-based learning medium significantly improves students' vocabulary knowledge. The improvement is indicated by the increase in the mean score from 64.23 in the pre-test to 77.88 in the post-test, with a gain of 13.65 points.

Furthermore, the hypothesis testing showed that the alternative hypothesis (H_1) was accepted and the null hypothesis (H_0) was rejected. Therefore, it can be concluded that BookWidgets was effective as a web-based learning medium in enhancing students' vocabulary knowledge at MAN 2 Bone.

Therefore, BookWidgets can be considered an effective and innovative web-based learning medium that supports vocabulary development through interactive and student-centered learning activities.

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